



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,271	10/10/2001	Edward L. Witzke	SD-6778/96430	8861
20567	7590	06/14/2006	EXAMINER	
SANDIA CORPORATION P O BOX 5800 MS-0161 ALBUQUERQUE, NM 87185-0161			MARCELO, MELVIN C	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/975,271

Applicant(s)

WITZKE ET AL.

Examiner

Melvin Marcelo

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 14, 15, 17-24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-12, 14, 15, 17-24, 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3-29-2006 have been fully considered but they are not persuasive.

With respect to the argument that Leggett teaches a waveguide, Leggett also teaches that their invention can be in a cavity ("Frequencies in the middle to high microwave range would be most useful because of the high bandwidth available and because the small wavelengths are compatible with the use of narrow waveguides and cavities," column 2, lines 31-35).

With respect to the argument that TDMA packets do not equate to addressed signals, Newton's Telecom Dictionary defines TDMA as sending packets. Newton further defines packet as including destination and origin which are principal elements. Destination and origin are addressed signals. Thus, the TDMA packets do equate to addressed signals.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leggett (US 6,771,935 B1) in view of Newton's Telecom Dictionary (9th Edition, 1995) definition of "TDMA".

Leggett teaches a wireless bus (Figure 1) which functions as a radio frequency switch (column 1, lines 62-65 "digital switch"; and column 2, lines 18-31, "RF signals"). An RF transceiver chip provides the input and output signals for transmitting and receiving on the

Art Unit: 2616

wireless bus (column 2, lines 18-31). Leggett does not teach that the signals received at the input port and transmitted at the output port of the RF chip are addressed signals (Figure 1, the RF chip 16 has ports for distributing the signals to and from other integrated circuit chips 18 with each card 12).

However, Leggett suggest using the TDMA protocol for each card (column 2, lines 38-52). The TDMA protocol as defined in Newton's Telecom Dictionary includes the transmission of packets, which are signals with address information (destination, source). A skilled artisan would have been motivated by Leggett's suggestion to use the TDMA protocol in the wireless bus system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit and receive addressed signals in Leggett for the reason that the TDMA protocol includes signals transmitted as packets which are signals with address information.

With respect to the claims below, references to the prior art appear in parenthesis.

28. *A radio frequency switch (Leggett, wireless bus functions as a digital switch, column 1, lines 62-65) comprising:*

at least one radio frequency transmitter (Transmitter on RF transceiver chip 16, column 2, lines 18-31) for transmitting addressed input signals (TDMA protocol uses packets which are addressed signals) received at input ports (RF transceiver chip 16 receives signals from other integrated circuit chips 18 at its input ports); and

at least one addressed radio frequency receiver (Receiver on RF transceiver chip 16) for receiving the transmitted input signals according to output port address (TDMA protocol uses packets which are addressed signals, wherein the RF transceiver chip 16 would have distributed the received signals to the other integrated circuit chips 18 at its output ports).

Allowable Subject Matter

4. Claims 2-12, 14, 15, 17-24, 26 and 27 are allowed.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

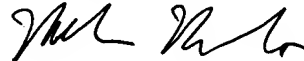
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Marcelo whose telephone number is 571-272-3125. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Melvin Marcelo
Primary Examiner
Art Unit 2616

June 11, 2006